

Installation Guidelines for Flammable & Combustible Liquid Aboveground Storage Tanks (AGST)

1. **Spacing:** The distances stipulated below are general guidelines for the storage of stable liquids at atmospheric pressure. The distances noted in parts “B” and “C” shall be doubled if the location is not within the jurisdiction of a fire department. The distances noted in parts “B” and “C” do not apply to aboveground motor fuel storage tanks located at automotive service stations. These will be covered in another section.

A. There shall be at least three (3) feet of spacing (shell-to-shell) between any two (2) tanks.

B. The distances to nearest property line shall be as follows:

<u>Gallons</u>	<u>Distances</u>
275 or less	5 feet
276 to 750	10 feet
751 to 12,000	15 feet
12,001 to 30,000	20 feet
30,001 to 50,000	30 feet
50,001 to 100,000	50 feet

C. The distance from nearest important building shall be as follows:

<u>Gallons</u>	<u>Distances</u>
30,000 or less	5 feet
30,001 to 50,000	10 feet
50,001 to 100,000	15 feet

2. **Separation for LP Tanks:** Tanks shall be separated from LP containers by at least 20 feet.

3. **Impoundment:** Means shall be provided to contain spillage from tanks.

A. Dikes shall be constructed of well tamped earth, steel, concrete or solid masonry.

B. Catch basins shall be designed to provide a 1% slope away from the tank for at least 50 feet.

C. Double-Walled tanks.

Exception: Tanks storing Class IIIB liquids do not require impoundment.

4. **Vents – Working & Emergency:**

A. A working vent shall be provided. The diameter of the vent pipe shall be equal to or greater than the diameter of the fill connection.

B. A proportionally sized emergency relief vent shall be provided. Double-walled tanks require the interstitial space to have an additional proportionally sized emergency relief vent.

<u>Vertical Tanks</u>	
<u>Gallons</u>	<u>Size</u>
1,000 or less	4 inches
1,001 to 6,500	6 inches
6,501 to 20,000	8 inches

NOTE: Vertical tanks designed to fail at the roof-to-shell seam need not comply with this requirement.

<u>Horizontal Tanks</u>	
<u>Gallons</u>	<u>Size</u>
1,000 or less	4 inches
1,001 to 4,750	6 inches
4,751 to 22,000	8 inches

5. **Piping:** All piping installed aboveground shall be steel. All steel piping installed underground shall be coated and cathodically protected. Underground piping may be non-metallic, but must be listed for its intended use.
6. **Fill Pipes:** A fill pipe that terminates within 6 inches of the tank bottom shall be provided. The pipe shall be installed so that vibration is minimized.
7. **Valves:** Each connection to the tank through which liquid can flow shall be provided with a valve that is located as close as practical to the shell of the tank. The tank outlet shall be equipped with a device such as a solenoid or anti-siphon valve if pump/dispenser is not located on top of the tank.
8. **Signs:** Warning signs shall be conspicuously posted in the dispensing area and shall incorporate the following or equivalent wording:
 - It is unlawful and dangerous to dispense gasoline into unapproved containers.
 - No smoking.
 - Stop motor.
 - No filling of portable containers in or on a motor vehicle.
 - Place container on ground before filling.
 - Discharge your static electricity before fueling by touching a metal surface away from the nozzle.
 - Do not re-enter your vehicle while gasoline is pumping.
 - If a fire starts, do not remove nozzle – back away immediately.
 - Do not allow individuals under licensed age to use the pump.
9. **Spill Plan:** A spill prevention control and counter measures plan shall be prepared if the aggregate storage exceeds 1,320 gallons or if an individual storage tank exceeds 660 gallons.
10. **Overfill Prevention:** Overfill prevention shall be provided for all **double-walled tanks** and for any tank storing Class I liquids at a public service station. For further information, please call the Hazardous Materials Section at 502-573-1702.

Aboveground Motor Fuel Storage At Service Stations

1. **Applicability:** These guidelines shall apply to aboveground motor fuel storage tanks at public and private service stations.
2. **Size Limitations:** Tank sizes shall be limited to 12,000 gallons individual capacity and 40,000 gallons aggregate capacity.
3. **Distances:** The following distances shall apply to aboveground motor fuel tanks at service stations:
 - A. 50 feet from:
 - The nearest important building on the same property.
 - Any fuel dispenser.
 - The nearest side of a public way.
 - B. 100 feet from any property line that is or can be built upon, including the opposite side of a public way.

NOTE 1: The distances stipulated in items “A” and “B” above may be reduced by half if the tanks are encapsulated in concrete vaults.

NOTE 2: Tanks installed for the purpose of refueling company owned vehicles and whose individual capacity does not exceed 12,000 gallons for each class of liquid, shall be located in accordance with general storage.

NOTE 3: Tanks storing Class II and Class III liquids shall be located in accordance with general storage requirements.

4. **Emergency Shut-Off:** A clearly identified and easily accessible switch(es) or circuit breaker(s) shall be provided at a location remote from the dispensing devices to shut-off the power to all dispensing devices and remote pumps. Said device shall be more than 20 feet, but less than 100 feet from the dispensing area.
5. **Signs:** A “STOP MOTOR WHILE REFUELING” sign shall be posted in the dispensing area.